



Loudoun County, Virginia

REQUEST FOR PROPOSAL

Roadway Design for the Route 7 and Route 659 Interchange

ACCEPTANCE DATE: Prior to 4:00 p.m., January 7, 2008 "Local Verizon" time

RFP NUMBER: QQ-01371

ACCEPTANCE PLACE Department of Management and Financial Services
Division of Procurement, MSC #41C
1 Harrison Street, SE, 4th Floor
Leesburg, Virginia 20175

A Pre-Proposal Conference will be held on December 20, 2007 at 10:00 AM in the Lovettsville Room of the Loudoun County Government Center, 1 Harrison Street, SE, 1st Floor, Leesburg, Virginia 20175 for clarification of any questions on the specifications.

Requests for information related to this Proposal should be directed to:

Donald R. Legg, CPPO
Acting Purchasing Agent

(703) 777-0566

(703) 771-5097 (Fax)

Email address: Donnie.Legg@loudoun.gov

This document can be downloaded from our web site:
www.loudoun.gov/procurement

Issue Date: December 6, 2007

IF YOU NEED ANY REASONABLE ACCOMMODATION FOR ANY TYPE OF DISABILITY IN ORDER TO PARTICIPATE IN THIS PROCUREMENT, PLEASE CONTACT THIS DIVISION AS SOON AS POSSIBLE.

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Prepared By: Donald R. Legg, CPPO /s/
Acting Purchasing Agent

Date: December 6, 2007

Roadway Design for the Route 7 and Route 659 Interchange

1.0 PURPOSE

The intent of this Request for Proposal is to obtain the services of a qualified engineering firm to provide roadway design services for the Route 7 and Route 659 Interchange in Loudoun County. The work for this project includes the preparation of design plans for this interchange complying with the latest edition of the *Virginia Department of Transportation Road and Bridge Standards and Specifications*, *Federal Highway Administration Manual on Uniform Traffic Control Devices*, and the Virginia Department of Conservation and Recreation policies and procedures. The plans shall be comprehensive in nature and include roadway design; structure and bridge design; hydraulic design (including bridge H&HA and scour analysis); erosion and sediment control, and storm water management design; traffic engineering design, including traffic data collection and analysis; sign, signal and pavement markings; lighting plans and ITS; retaining wall design; participation in bidability, constructability, and value engineering reviews; coordination of utility design; permit sketches, and complete survey data.

Although this proposal is for complete one hundred percent (100%) design plans for this project, because of resource constraints, the County is only prepared to authorize the completion of thirty percent (30%) of the plans at this time. At some point in the future, when resources are available, the County may elect to authorize additional work beyond the thirty percent (30%) limit.

2.0 COMPETITION INTENDED

It is the County's intent that this Request for Proposal (RFP) permit competition. It shall be the offeror's responsibility to advise the Purchasing Agent in writing if any language, requirement, specification, etc., or any combination thereof, inadvertently restricts or limits the requirements stated in this RFP to a single source. The Purchasing Agent must receive such notification not later than fifteen (15) days prior to the date set for acceptance of proposals.

3.0 BACKGROUND INFORMATION

Route 7/Route 659 Interchange - This interchange has been a County priority for many years. Traffic growth in the Route 7 and Route 659 corridors make this a critical component of the County's transportation improvement program. Some conceptual design work was proffered for this project as part of the rezoning at Lansdowne Village Greens. Those plans, now complete, but unapproved, could serve as the basis for the design work solicited in this document. In addition to the proposed interchange, the County and the Virginia Department of Transportation have programmed improvements for the larger Route 659 corridor. Two projects in particular are relevant to this: 1) Preliminary engineering for the segment of Route 659 between the Greenway and Route 7 (VDOT Project 0659-053-262 P102); and, 2) Right-of-way and construction for the segment of Route 659 between Gloucester Parkway and Route 7 (VDOT Project 0659-053-262 R202 C502).

4.0 SCOPE OF SERVICES

All proposals must be made on the basis of, and either meet or exceed, the requirements contained in the scope of services herein. All proposals must include a proposed project schedule with milestones. This schedule is to be of sufficient detail to set forth the anticipated time to complete all tasks, as well as to document any needed interaction with County staff and VDOT.

The detailed scope of services is included in Attachment 1.

5.0 EVALUATION OF PROPOSALS & SELECTION PROCEDURES

The Instructions for Preparing Proposals set forth criteria which will be used in the receipt of proposals and selection of the successful firm. In addition, the criteria set forth below will be considered.

5.1 Proposal Analysis Group

The Proposal Analysis Group (PAG) will be made up of the following members:

- Representative from the Loudoun County Department of Building and Development,
- Representative from the Loudoun County Office of Capital Construction,
- Representative from the Loudoun County Office of Transportation Services,
- Representative from the Virginia Department of Transportation, and
- Representative from Division of Procurement.

5.2 Schedule

Proposals Due	January 7, 2008
Shortlist Announcement	January 22, 2008
Interviews	January 28-29, 2008
Final Ranking Announcement	February 4, 2008

Note: These dates are tentative and are subject to change.

5.3 Evaluation Process

The PAG will review and evaluate each proposal and selection will be made on the basis of the criteria listed below. The offerors submitting proposals shall include with that proposal statements on the following:

- A. Proven management skills and technical competence including specialized experience in the design of public roadways and analogous traffic control devices of similar nature and magnitude. Demonstrated performance in providing well organized, accurate, and fully coordinated construction documents; and projects delivered

on time and within budget. **(35 points)**

- B. Credentials of project team, including: project manager's and major subconsultant's portfolio of related projects; history of the proposed team working together on past projects, particularly as related to prior work of this nature. **(25 points)**
- C. Demonstrated understanding of task and requirements as depicted in the proposal. **(15 points)**
- D. Demonstrate knowledge of the Virginia Department of Transportation policies and procedures and Loudoun County regulatory requirements. **(10 points)**
- E. Compliance with contractual terms. **(5 points)**
- F. Overall quality and completeness of proposal, and interview if selected for short list. **(10 points)**

Once the PAG has read and evaluated each proposal, a composite preliminary ranking will be developed which indicates the group's collective ranking of the highest rated proposals in a descending order. The preliminary rating will be used to select offerors for further consideration – the short-list. Thereafter, the PAG will conduct interviews and have discussions with only the top ranked offerors.

After the interviews and discussions are completed, the PAG will finalize the rankings. Final negotiations for a binding estimate of cost will begin with the top-ranked offeror. If a contract acceptable to the County cannot be negotiated at a price considered fair and reasonable, negotiations shall be terminated with the top-ranked offeror and negotiations conducted with the next-ranked offeror, and so on. The PAG will conduct all subsequent negotiations and will make a recommendation to the Board of Supervisors for the resulting contract award.

5.4 Submission Requirements

The entire project team, including the Design Firm, its designated Project Manager, and all Consultants who will work on the project, will be evaluated. The Project Manager is the individual or design studio who will have the primary responsibility to conceive the design concepts. In the proposal submission, the Engineer shall:

- Be precise about the division of responsibility among their member firms.
- Identify past experience working with public roadway projects and

analogous traffic control devices.

- Identify clearly the people who will be involved, what they will do, and their specific experience in that role.
- Identify key issues from the Engineer's perspective.
- Suggest how best to maintain public involvement, interest, and approval during the design process.
- Provide a brief statement of key issues and challenges in designing public roadway projects.
- Provide outline work plan and tentative schedule.

The Engineer shall submit 8" x 10" graphics (maximum of three (3) per project) and a narrative description (maximum of one (1) page per project) of not more than five (5) projects completed within the past ten (10) years. The narrative shall address the design approach and salient features of each project, and discuss how the client's design, economic, and operational objectives were satisfied by the design.

6.0 INSTRUCTIONS FOR PREPARING PROPOSALS

6.1 Submission of Proposals

Before submitting a proposal, read the entire solicitation, including the Contract Terms and Conditions. Failure to read any part shall not relieve the successful offeror of its contractual obligations. The proposal container shall be sealed and completely and properly identified. The face of the container shall indicate the RFP number, time and date of acceptance, and the title of the RFP. The Division of Procurement must receive proposals BEFORE the hour specified on the acceptance date. Proposals may either be mailed or hand delivered to 1 Harrison Street, SE, 4th Floor, MSC #41C, Leesburg, Virginia 20175. Faxed and emailed proposals will not be accepted.

6.2 Questions and Inquiries

Questions and inquiries, both verbal and written, will be accepted from any and all offerors. The Division of Procurement is the sole point of contact for this solicitation unless otherwise instructed herein. Unauthorized contact with other Loudoun County staff regarding the RFP may result in the disqualification of the offeror. Inquiries pertaining to the Request for Proposal must give the RFP number, title, and acceptance date. Material questions will be answered in writing with an Addendum provided however, that all questions are received at least ten (10) days in advance of the proposal acceptance date. It is the responsibility of all offerors to ensure that they have received all addendums. Addendums can be downloaded from www.loudoun.gov/procurement.

6.3 Addendum and Supplement to Request

If it becomes necessary to revise any part of this request or if additional data is necessary to enable an exact interpretation of provisions of this

request, an addendum will be issued. It is the responsibility of the offeror to ensure that it has received all Addenda prior to submitting a proposal. All Addenda can be downloaded from www.loudoun.gov/procurement.

6.4 Completion

Proposal must show number of days required to complete the project under normal conditions. Failure to state completion time obligates offeror to complete the project according to the County's schedule. Unrealistically short or long completion promised may cause proposal to be disregarded. Consistent failure to meet delivery promises without valid reason may cause removal from offerors list.

6.5 Proprietary Information

Trade secrets or proprietary information submitted by an offeror in connection with this solicitation shall not be subject to disclosure under the Virginia Freedom of Information Act; however, **pursuant to Section 2.2-4342 of the Code of Virginia, the offeror must invoke the protections of this section prior to or upon submission of the data or other materials, and must clearly identify the data or other materials to be protected and state the reasons why protection is necessary. Failure to abide by this procedure may result in disclosure of the offeror's information.** Offerors shall not mark sections of their proposal as proprietary if they are to be part of the award of the contract and are of a "Material" nature.

6.6 Authority to Bind Firm in Contract

Proposals MUST give full firm name and address of offeror. Failure to manually sign proposal/bid may disqualify it. Person signing proposal/bid should show TITLE or AUTHORITY TO BIND THE FIRM IN A CONTRACT. Firm name and authorized signature must appear on proposal in the space provided on the pricing page. Those authorized to sign are as follows:

If a sole proprietorship, the owner may sign.

If a general partnership, any general partner may sign.

If a limited partnership, a general partner must sign.

If a limited liability company, a "member" may sign or "manager" must sign if so specified by the Articles of Organization.

If a regular corporation, the CEO, President or Vice-President must sign.

Others may be granted authority to sign but the County requires that a corporate document authorizing him/her to sign be submitted with proposal.

6.7 Preparation and Submission of Proposals

- A. All proposals shall be signed in ink by the offeror or authorized principals of the offeror.
- B. All attachments to the Request for Proposal requiring execution by the offeror, except those related to cost or man-hours, are to be

returned with the proposals.

- C. Proposals are to be returned in a sealed container. The face of the container shall indicate the RFP number, time and date of public acceptance, and the title of the proposal.
- D. The Division of Procurement must receive proposals not later than the time and date specified on the cover sheet of this RFP. Requests for extensions of this time and date will not be granted. Offerors mailing their proposals shall allow for normal mail time to ensure receipt of their proposals by the Division of Procurement prior to the time and date fixed for acceptance of the proposals. Proposals or unsolicited amendments to proposals received by the County after the acceptance date will not be considered. Proposals will be publicly accepted and logged in at the time and date specified above.
- E. Each offeror shall submit one (1) original and three (3) copies of their technical proposal to the County's Division of Procurement as indicated on the cover sheet of this Request for Proposal. The original proposal shall be clearly marked.

6.8 Work Plan

The offeror must provide a detailed work plan describing the individual tasks to be performed and the relative scheduling of those tasks including a detailed listing of County and offeror resources, according to skill level. All deliverable items should be identified and described.

6.9 Withdrawal of Proposals

All proposals submitted should be valid for a minimum period of ninety (90) calendar days following the date established for acceptance.

Proposals may be withdrawn on written request from the offeror at the address shown in the solicitation prior to the time of acceptance.

Negligence on the part of the offeror in preparing the proposal confers no right of withdrawal after the time fixed for the acceptance of the proposals.

6.10 County-Furnished Support/Items

The level of support required from County personnel for the completion of each task shall be estimated by position and man-days.

The offeror shall indicate the necessary telephones, office space and materials the offeror requires. The County may furnish these facilities if the County considers them reasonable, necessary, and available for the offeror to complete its task.

6.11 Subconsultants

Offerors shall include a list of all subconsultants in their proposal. Proposals shall also include a statement of the subconsultants' qualifications. The County reserves the right to reject the successful

offeror's selection of subconsultants for good cause. If a subconsultant is rejected, the offeror may replace that subconsultant with another subconsultant subject to the approval of the County. Any such replacement shall be at no additional expense to the County, nor shall it result in an extension of time without the County's approval.

6.12 References

All offerors shall include, with their proposals, a list of at least three (3) current references for whom comparable work has been performed. This list shall include company name, person to contact, address, and telephone and FAX numbers. Failure to include references may be cause for rejection of proposal as non-responsive. Offeror hereby releases listed references from all claims and liability for damages that may result from the information provided by the reference.

6.13 Late Proposals

LATE proposals will be returned to offeror UNOPENED if RFP number, acceptance date and offeror's return address is shown on the container.

6.14 Rights of County

The County reserves the right to accept or reject all or any part of any proposal, waive informalities and award the contract to best serve the interest of the County.

6.15 Prohibition as Subconsultants

No offeror who is permitted to withdraw a proposal shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn proposal was submitted.

6.16 Deviations from Scope of Services

If there is any deviation from that prescribed in the scope of services, the appropriate line in the scope of services shall be ruled out and the substitution clearly indicated. The County reserves the right to determine the responsiveness of any deviation.

6.17 Notice of Award

A Notice of Award will be posted on the County's web site (www.loudoun.gov/procurement) and on the bulletin board located in the Division of Procurement, 4th floor, 1 Harrison St, SE, Leesburg, Virginia 20175.

6.18 Protest

Offerors may refer to Sections 2.2-4357 through 2.2-4364 of the Code of Virginia to determine their remedies concerning this competitive process.

6.19 Miscellaneous Requirements

- A. The County will not be responsible for any expenses incurred by an offeror in preparing and submitting a proposal. All proposals shall provide a straight-forward, concise delineation of the offeror's capabilities to satisfy the requirements of this request. Emphasis should be on completeness and clarity of content, and not on volume or elaborate presentation materials.
- B. Offerors who submit a proposal in response to this RFP may be required to make an oral presentation of their proposal.
- C. The contents of the proposal submitted by the successful offeror as well as this RFP will become part of any contract awarded as a result of the Scope of Services contained herein. The successful offeror will be expected to sign a contract with the County.
- D. The County reserves the right to reject any and all proposals received by reason of this request, or to negotiate separately in any manner necessary to serve the best interests of the County. Offerors whose proposals are not accepted will be notified in writing.

6.20 Debarment

By submitting a proposal, the offeror is certifying that he is not currently debarred by the County, or in the case of a procurement involving federal funds, by the Federal Government. A copy of the County's debarment procedure in accordance with Section 2.2-4321 of the Code of Virginia is available upon request.

6.21 Registering of Corporation

Any corporation, LLC, or LLP transacting business in Virginia shall secure a certificate of authority, as required by Section 13.1-757 of the Code of Virginia, from the State Corporation Commission (SCC), PO Box 1197, Richmond, VA. The SCC may be reached at (804) 371-9733 or at <http://www.scc.virginia.gov/division/clk/diracc.html>. Certain isolated transactions or sales conducted through independent Consultants do not require registration. Offerors should consult the Code of Virginia Section 13.1-757 for more information.

6.22 Form W-9 Required

Each offeror shall submit a completed W-9 form with their offer in the event of contract award. This information is required in order to issue purchase orders and payments to your firm. A copy of this form can be downloaded from <http://www.irs.gov/pub/irs-pdf/fw9.pdf>.

6.23 Insurance Coverage

Offerors shall include with their proposal a copy of their current Certificate of Insurance that illustrates the current level of coverage the offeror carries. The Certificate can be a current file copy and does not need to

include any "additional insured" language for the County.

7.0 CONTRACT TERMS AND CONDITIONS

The Contract with the successful offeror will contain the following Contract Terms and Conditions. **Offerors intending to require additional or different language must include such language with their proposal. Failure to provide offeror's additional or alternate Contract terms may result in rejection of the proposal.**

7.1 Procedures

The extent and character of the services to be performed by the Consultant shall be subject to the general control and approval of the Director, Office of Transportation Services or their authorized representative(s). The Consultant shall not comply with requests and/or orders issued by other than the Director, Office of Transportation Services or their authorized representative(s) acting within their authority for the County. Any change to the Contract must be approved in writing by the Purchasing Agent and the Consultant.

7.2 Delays

Time is of the essence. If delay is foreseen, the Consultant shall give immediate written notice to the Division of Procurement. The Consultant must keep the County advised at all times of status of work. Default in promised completion (without accepted reasons) or failure to meet scope of services, authorizes the Division of Procurement to purchase services elsewhere and charge full increase in cost to the defaulting Consultant or deduct the costs from any balance owing the Consultant.

7.3 County Reserved Rights

The County reserves the right, at its sole discretion, to issue Requests for Proposal for similar work and other projects as the need may occur. The County also reserves the right to issue Purchase Orders, and to expand or otherwise modify existing Purchase Orders, to other Open-End Consultants based on its sole discretion, in consideration of its knowledge and/or evaluation of each Consultant's qualifications, expertise, capabilities, performance record, current ability to perform, location and/or distance to the project, and any and all other factors as may be pertinent to the particular project and for the convenience of the County.

7.4 Material Safety Data Sheets

By law, the County of Loudoun will not receive any materials, products, or chemicals which may be hazardous to an employee's health unless accompanied by a Material Safety Data Sheet (MSDS) when received. This MSDS will be reviewed by the County, and if approved, the materials, product or chemical can be used. If the MSDS is rejected, the Consultant must identify a substitute that will meet the County's criteria for approval.

7.5 Business, Professional, and Occupational License Requirement

All firms or individuals doing business in Loudoun County are required to be licensed in accordance with the County's "Business, Professional, and Occupational Licensing (BPOL) Tax" Ordinance.

Wholesale and retail merchants without a business location in Loudoun County are exempt from this requirement. Questions concerning the BPOL Tax should be directed to the Office of Commissioner of Revenue, telephone (703) 777-0260.

7.6 Payment of Taxes

All Consultants located or owning property in Loudoun County shall assure that all real and personal property taxes are paid.

The County will verify payment of all real and personal property taxes by the Consultant prior to the award of any Contract or Contract renewal.

7.7 Insurance

The Consultant shall provide and maintain the following minimum limits of insurance coverage during the period of performance required under this agreement:

A. Commercial General Liability

The Consultant's insurance shall cover the Consultant for those sources of liability which would be covered by the latest edition of the standard Commercial General Liability Coverage Form, as filed for use in the Commonwealth of Virginia by the Insurance Services Office, without the attachment of restrictive endorsements other than the elimination of Coverage C, Medical Payments, and the elimination of coverage for Fire Damage Legal Liability.

The minimum limits to be maintained by the Consultant (inclusive of any amounts provided by an umbrella or excess policy) shall be those that would be provided with the attachment of the Amendment of Limits of Insurance (Designated Project or Premises) endorsement to a Commercial General Liability Policy with the following amounts specified for this project:

	<u>Limits</u>
General Aggregate Limit (Other than Products/Completed Operations)	\$1,000,000
Products-Completed Operations Aggregate Limit	\$ 500,000
Personal and Advertising Injury Limit	\$1,000,000

Each Occurrence Limit	\$1,000,000
Fire Damage Limit	\$ 50,000
Medical Expense Limit	\$ 5,000

The Consultant shall continue to maintain Products/Completed Operations coverage for a period of five (5) years after the Contract completion date. The insurance shall cover those sources of liability which would be covered by the latest edition of Coverage A of the Commercial General Liability Form or Coverage A of the Products/Completed Operations Liability Coverage Form, as filed for use in the Commonwealth of Virginia by the Insurance Services Office, without restrictive endorsements. The minimum limits to be maintained by the Consultant (inclusive of any amounts provided by an umbrella or excess policy) shall be those that would be provided with the attachment of the Amendment of Limits of Insurance

(Designated Project or Premises) endorsement with the following amounts specified for this project.

	<u>Limits</u>
Products-Completed Operations Aggregate Limits	\$500,000
Each Occurrence Limit	\$500,000

B. Business Auto Policy

1. The Consultant's insurance shall cover the Consultant for those sources of liability which would be covered by Part IV of the latest edition of the standard Business Auto Policy, as filed for use in the Commonwealth of Virginia by the Insurance Service Office, without the attachment of restrictive endorsements. Coverage shall include owned, non-owned and hired autos.
2. The minimum limits to be maintained by the Consultant (inclusive of any amounts provided by an umbrella or excess policy) shall be \$1,000,000 per accident combined single limit for bodily injury liability and property damage liability.

C. Workers' Compensation and Employers' Liability

1. The Consultant's insurance shall cover the Consultant and its subconsultants of every tier of those sources of liability which would be covered by the latest edition of the standard Workers' Compensation Policy, as filed for use in the

Commonwealth of Virginia by the National Council on Compensation Insurance, without restrictive endorsements, but including Broad Form All States Endorsement. In addition to coverage for the Virginia Workers' Compensation Act, where appropriate, coverage is to be included for the United States Longshore and Harbor Workers' Compensation Act, Maritime including Jones Act, Federal Employers Liability Act and any other applicable federal or state law.

2. Subject to the restrictions of coverage found in the standard Workers' Compensation Policy, there shall be no maximum limit on the amount of coverage for liability imposed by the Virginia Workers' Compensation Act, the United States Longshore and Harbor Workers' Compensation Act, or any other coverage customarily insured under Part One of the standard Workers' Compensation Policy. The minimum amount of coverage for those coverage customarily insured under Part Two of the standard Workers' Compensation (inclusive of any amounts provided by an umbrella or excess policy) shall be \$1,000,000 bodily injury by accident each accident, \$1,000,000 bodily injury by disease each employee, and \$1,000,000 bodily injury by disease policy limit or aggregate where such aggregate is applicable under the terms of the standard Workers' Compensation Policy.

D. Professional Liability

1. The Consultant shall obtain an Errors and Omissions Liability Policy (E&O Policy) with all policy exclusions and any endorsements that restrict coverage attached.
2. The minimum E&O Policy limits to be provided by the Consultant (inclusive of any amounts provided by an umbrella or excess policy) shall be \$1,000,000 per claim.
3. Notice of Cancellation and/or Restriction - The policy must be specifically endorsed to provide the County within forty-five (45) days notice of any cancellation, non-renewal, change in coverage, and/or restriction.

The insurance provided by the Consultant pursuant to this Contract shall apply on a primary basis and any other insurance or self-insurance maintained by the County or the County's official, officer, agent or employee shall be excess of and not contributing with the insurance provided by or on behalf of the Consultant.

The coverage other than Workers' Compensation and Professional Liability may be either on an occurrence or a claims-made basis. Provided, however, that claims-made coverage for other than the Products/Completed Operations shall respond to claims arising out of accidents, occurrences, incidents and offenses happening after the commencement of the resulting Contract but before the end of the

Contract completion date provided that the claim is made within five (5) years after the Contract completion date. If coverage is provided on a "claims-made" form, coverage shall remain in force for no less than five (5) years after completion of the Contract. Proof of renewal coverage shall be provided to the County each of the next five (5) years following completion of the Contract. Limits or terms of coverage shall not be restricted without prior approval of the County.

Prior to commencing work under a resulting Contract, the Consultant shall furnish the County with a Certificate(s) of Insurance naming the County, its officers, employees and agents, as additional insureds. This provision that the County be made an additional insured does not apply to Professional Liability or Workers' Compensation Liability. The Consultant shall provide forty-five (45) day notice of cancellation, non-renewal, or change in the insurance coverage, and/or restrictions.

7.8 Hold Harmless Clause

The Consultant shall indemnify and hold harmless the County, including its officials and employees, from loss (specifically including reasonable attorney's fees and defense costs incurred with the defense of third party claims) from all suits, actions, or claims of any kind brought as a consequence of any negligent act, error, omission, or breach of the applicable professional standard of care by the Consultant and/or its subconsultants. The Consultant agrees that this clause shall include, but is not limited to, claims involving infringement of patent or copyright. This section shall survive completion of the Contract.

7.9 Safety

All Consultants and subconsultants performing services for the County of Loudoun are required and shall comply with all Occupational Safety and Health Administration (OSHA), State and County Safety and Occupational Health Standards and any other applicable rules and regulations. Also all Consultants and subconsultants shall be held responsible for the safety of their employees and any unsafe acts or conditions that may cause injury or damage to any persons or property within and around the work site area under this Contract.

7.10 Notice of Required Disability Legislation Compliance

Loudoun County government is required to comply with State and Federal disability legislation: The Rehabilitation Act of 1993 Section 504, The Americans with Disabilities Act (ADA) for 1990 Title II and The Virginians with Disabilities Act of 1990.

Specifically, Loudoun County, may not, through its contractual and/or financial arrangements, directly or indirectly avoid compliance with Title II of the Americans with Disabilities Act, Public Law 101-336, which prohibits discrimination by public entities on the basis of disability. Subtitle A protects qualified individuals with disability from discrimination on the basis of disability in the services, programs, or activities of all State and

local governments. It extends the prohibition of discrimination in federally assisted programs established by the Rehabilitation Act of 1973 Section 504 to all activities of State and local governments, including those that do not receive Federal financial assistance, and incorporates specific prohibitions of discrimination on the basis of disability in Titles I, III, and V of the Americans with Disabilities Act. The Virginians with Disabilities Act of 1990 follows the Rehabilitation Act of 1973 Section 504.

7.11 Ethics in Public Contracting

The provisions contained in Sections 2.2-4367 through 2.2-4377 of the Virginia Public Procurement Act as set forth in the 1950 Code of Virginia, as amended, shall be applicable to all Contracts solicited or entered into by the County. A copy of these provisions may be obtained from the Purchasing Agent upon request.

The above-stated provisions supplement, but do not supersede, other provisions of law including, but not limited to, the Virginia State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq.), the Virginia Governmental Frauds Act (§ 18.2-498.1 et seq.) and Articles 2 and 3 of Chapter 10 of Title 18.2. The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the Virginia Conflict of Interests Act.

7.12 Employment Discrimination by Consultants Prohibited

Every Contract of over \$10,000 shall include the following provisions:

- A. During the performance of this contract, the Consultant agrees as follows:
 - 1. The Consultant will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Consultant. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - 2. The Consultant, in all solicitations or advertisements for employees placed by or on behalf of the Consultant, shall state that such Consultant is an equal opportunity employer.
 - 3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient to meet this requirement.
- B. The Consultant will include the provisions of the foregoing paragraphs, 1, 2, and 3 in every subcontract or purchase order of

over \$10,000, so that the provisions will be binding upon each subconsultant or vendor.

7.13 Drug-free Workplace

Every Contract of over \$10,000 shall include the following provisions:

During the performance of this Contract, the Consultant agrees to (i) provide a drug-free workplace for the Consultant's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Consultant's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Consultant that the Consultant maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subconsultant or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific Contract awarded to a Consultant in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

7.14 Faith-Based Organizations

Loudoun County does not discriminate against faith-based organizations.

7.15 Immigration Reform and Control Act of 1986

By entering this Contract, the Consultant certifies that it does not and will not during the performance of this Contract violate the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens.

7.16 Exemption from Taxes

The Consultant shall not charge the County for Virginia State Sales or Use Taxes or Federal Excise Tax on the finished goods or product provided under the Contract. The County is exempt from Virginia State Sales or Use Taxes and Federal Excise Tax. The Consultant shall be responsible for the payment of any sales, use, or excise tax it incurs in providing the goods required by the Contract, including but not limited to taxes on materials purchased by a Consultant for incorporation in or use on a construction project.

7.17 Invoicing and Payment

The Consultant shall submit invoices, in triplicate, at the completion of tasks and submission of deliverables; such statement to include a detailed

breakdown of all charges for that deliverable.

All such invoices will be paid promptly by the County unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed and the validity of the claim. The Consultant shall provide complete cooperation during any such investigation.

All invoices shall be forwarded to the following address:

County of Loudoun, Virginia
Office of Transportation Services
1 Harrison Street, SE 3rd Floor MSC# 69
Leesburg, Virginia 20175
Attn: Dale Castellow

Individual Consultants shall provide their social security numbers, and proprietorships, partnerships, and corporations shall provide their federal employer identification number on the pricing form.

7.18 Payments to Subconsultants

Within seven (7) days after receipt of amounts paid by the County for work performed by a subconsultant under this Contract, the Consultant shall either:

- A. Pay the subconsultant for the proportionate share of the total payment received from the County attributable to the work performed by the subconsultant under this Contract; or
- B. Notify the County and subconsultant, in writing, of his intention to withhold all or a part of the subconsultant's payment and the reason for non-payment.

The Consultant shall pay interest to the subconsultant on all amounts owed that remain unpaid beyond the seven (7) day period except for amounts withheld as allowed in item B above.

Unless otherwise provided under the terms of this Contract, interest shall accrue at the rate of one percent (1%) per month.

The Consultant shall include in each of its subcontracts a provision requiring each subconsultant to include or otherwise be subject to the same payment and interest requirements as set forth above with respect to each lower-tier subconsultant.

The Consultant's obligation to pay an interest charge to a subconsultant pursuant to this provision may not be construed to be an obligation of the County.

7.19 Substitutions

NO substitutions or cancellations shall be permitted after Contract award without written approval by the Division of Procurement. Where specific

employees are proposed by the Consultant for the work, those employees shall perform the work as long as that employee works for the Consultant, either as an employee or subcontractor, unless the County agrees to the substitution. Requests for substitutions shall be reviewed and may be approved by the County in its reasonable discretion.

7.20 Assignment of Contract

The Consultant is prohibited from assigning, transferring, conveying, subletting, or otherwise disposing of this agreement or its rights, title or interest therein or its power to execute such agreement to any other person, company or corporation without the prior consent and approval in writing by the County.

7.21 Termination

Subject to the provisions below, the Contract may be terminated by the County upon thirty (30) days advance written notice to the Consultant; but if any work or service hereunder is in progress, but not completed as of the date of termination, then the Contract may be extended upon written approval of the County until said work or services are completed and accepted.

A. Termination for Convenience

The County may terminate this Contract for convenience at any time in which case the parties shall negotiate reasonable termination costs.

B. Termination for Cause

In the event of Termination for Cause, the thirty (30) days advance notice is waived and the Consultant shall not be entitled to termination costs.

C. Termination Due to Unavailability of Funds in Succeeding Fiscal Years

If funds are not appropriated or otherwise made available to support continuation of the performance of this Contract in a subsequent fiscal year, then the Contract shall be canceled and, to the extent permitted by law, the Consultant shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the supplies or services delivered under the Contract.

7.22 Contractual Disputes

The Consultant shall give written notice to the Purchasing Agent of intent to file a claim for money or other relief within ten (10) calendar days of the occurrence giving rise to the claim or the beginning of the work upon which the claim is to be based, whichever is earlier.

The written claim shall be submitted to the Purchasing Agent no later than sixty (60) days after final payment. If the claim is not disposed of by

agreement, the Purchasing Agent shall reduce his decision to writing and mail or otherwise forward a copy thereof to the Consultant within thirty (30) days of receipt of the claim.

The Purchasing Agent's decision shall be final unless the Consultant appeals within thirty (30) days by submitting a written letter of appeal to the County Administrator, or his designee. The County Administrator shall render a decision within sixty (60) days of receipt of the appeal.

7.23 Prime Consultant Responsibilities

The Consultant(s) shall be responsible for completely supervising and directing the work under the resulting Contract(s) and all subconsultants that they may utilize. Subconsultants who perform work under the resulting Contract shall be responsible to the prime Consultant. The Consultant agrees to be fully responsible for the acts and omissions of their subconsultants and of persons employed by them.

7.24 Compliance with the County's General Conditions and Standard Division 1 Specifications for Construction

The Consultant shall read the County's General Conditions and Standard Division 1 Specifications and agree to comply with same, including but not limited to all review deadlines identified in those documents.

7.25 Ownership of Documents

Any reports, specifications, drawings, blueprints, negatives, electronic files or other documents prepared by the Consultant in the performance of its obligations under the Contract shall be the exclusive property of Loudoun County, and all such materials shall be returned to Loudoun County upon completion, termination, or cancellation of this Contract. The Consultant shall not use, willingly allow, or cause such materials to be used for any purpose other than performance of all Consultant's obligations under the resulting Contract without the prior written consent of Loudoun County. However, the Consultant may retain file copies which cannot be used without prior written consent of Loudoun County. Loudoun County agrees that the Consultant shall not be liable for damages, loss, or injury resulting from the future use of the provided documents for other than the project specified, when the Consultant is not the firm of record.

7.26 Submissions

All project correspondence, design/review documents, reports etc., prepared by the Consultant shall be distributed to the County's Project Manager for each major phase and sub-phase of the project in the quantities as directed. Within seven (7) days of project completion of each phase submit a project completion report with project close out documents to the County's Project Manager.

7.27 Severability

In the event that any provision shall be adjudged or decreed to be invalid, such ruling shall not invalidate the entire Agreement but shall pertain only

to the provision in question and the remaining provisions shall continue to be valid, binding and in full force and effect.

7.28 Applicable Laws/Forum Contract

This Contract shall be governed in all respects by the laws of the Commonwealth of Virginia. Any judicial action shall be filed in the Commonwealth of Virginia, County of Loudoun.

7.29 Notices

All notices and other communications hereunder shall be deemed to have been given when made in writing and either (a) delivered in person, (b) delivered to an agent, such as an overnight or similar delivery service, or (c) deposited in the United States mail, postage prepaid, certified or registered, addressed as follows:

TO CONSULTANT:

TO COUNTY:

Office of Transportation Services
1 Harrison Street, SE
3rd Floor
Leesburg, VA 20175
Attn: Dale Castellow

7.30 Licensure

To the extent required by the Commonwealth of Virginia or the County of Loudoun, the Consultant shall be duly licensed to sell the goods or perform the services required to be delivered pursuant to the Contract.

7.31 Registering of Corporation

The Consultant shall remain registered with the Virginia State Corporation Commission, if applicable, during the term of the Contract or any renewal.



Loudoun County, Virginia

Department of Management and Financial Services
Division of Procurement, MSC #41C
1 Harrison Street, 4th Floor
Leesburg, Virginia 20175

Roadway Design for the Route 7 and Route 659 Interchange

THE FIRM OF: _____

Address: _____

FEIN _____

Hereby proposes to provide the requested services as defined herein.

I understand that the omission of any items listed below from this proposal shall be cause for rejection of the proposal as non-responsive. I have ensured that I have received and acknowledged any and all Addenda.

Item:	Included: (x)
1. Any and all Addenda.	_____
2. One (1) original and _____(x) copies.	_____
3. W-9 Form	_____
4. Response to Section 5.4	_____
5. Certificate of Insurance	_____

Person to contact regarding this proposal: _____

Title: _____ Phone: _____ Fax: _____

E-mail: _____

Name and title of person authorized to bind the Firm (6.6):

Name: _____ Title: _____

Signature: _____ Date: _____

HOW DID YOU HEAR ABOUT THIS REQUEST FOR PROPOSAL?

QQ-01371

Please take the time to mark the appropriate line and return with either your proposal or no proposal.

- | | |
|--|---|
| <input type="checkbox"/> Associated Builders & Consultants | <input type="checkbox"/> Loudoun Co Small Business Development Center |
| <input type="checkbox"/> Bid Net | <input type="checkbox"/> Loudoun Times Mirror |
| <input type="checkbox"/> Builder's Exchange of Virginia | <input type="checkbox"/> Our Web Site |
| <input type="checkbox"/> Construction Market Data | <input type="checkbox"/> NIGP |
| <input type="checkbox"/> Direct Mail from Loudoun County | <input type="checkbox"/> The Plan Room |
| <input type="checkbox"/> Dodge Reports | <input type="checkbox"/> Valley Construction News |
| <input type="checkbox"/> LS Caldwell & Associates | <input type="checkbox"/> Virginia Business Opportunities |
| <input type="checkbox"/> Loudoun Co Chamber of Commerce | <input type="checkbox"/> VA Dept. of Minority Business Enterprises |
| | <input type="checkbox"/> RAPID |
| <input type="checkbox"/> Other _____ | |

SERVICE RESPONSE CARD

QQ-01371

Date of Service: _____

How did we do?

Please let us know how we did in serving you. We'd like to know if we are serving you at an acceptable level.

How would you rate the way your request for this document was handled?

Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor ☐

Did you have contact with Procurement staff? ☐

How would you rate the manner in which you were treated by the Procurement staff?

Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor ☐

How would you rate the overall response to your request?

Excellent ☐ Good ☐ Average ☐ Fair ☐ Poor ☐

COMMENTS: _____

Thank you for your response!

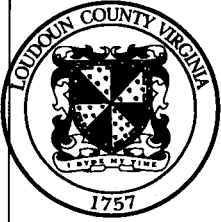
We can better assess our service to *you* through feed back from *you*.

Your Name: _____

Address: _____

Phone: _____ (day) _____ evening

Please return completed form with your proposal or send to: Patty Cogle • Management Services •
PO Box 7000 • Leesburg, VA 20177



Loudoun County, Virginia

Department of Management and Financial Services
Division of Procurement, MSC #41C
1 Harrison Street, 4th Floor
Leesburg, Virginia 20175

Roadway Design for the Route 7 and Route 659 Interchange

For Top Ranked Firm Only:

THE FIRM OF: _____

Address: _____

hereby proposes to provide the requested services as defined in Request for Proposal No. QQ-01371 for a total base fee of \$_____ (non-binding) broken down as follows:

1. Task 1 Kickoff Meeting/Preliminary Field Review	\$_____
2. Task 2 Field Survey and Base Mapping	\$_____
3. Task 3 Purpose and Need	\$_____
4. Task 4 Traffic Analysis	\$_____
5. Task 5 Environmental Assessment	\$_____
6. Task 6 Alternative Analysis/Conceptual Design	\$_____
7. Task 7 Preferred Alternatives	\$_____
8. Task 8 Initial Design	\$_____
9. Task 9 Construction Documents	\$_____
10. Task 10 Construction Bidding Phase	\$_____
11. Task 11 Construction Phase	\$_____
12. Post Construction Phase	\$_____
13. Reimbursables	\$_____

Note: Tasks 9 – 12 will only be authorized if additional funding becomes available. Offerors shall keep these prices firm for one year after contract award to allow time for additional funding to become available.

* Offerors shall provide an itemized breakdown of costs with their submission.

Payment terms, check appropriate one: net 30_____ or other _____

Person to contact regarding this **nonbinding** fee: _____

Title: _____ Phone: _____ Fax: _____

Name and title of person authorized to bind the Firm (6.6):

Name: _____ Title: _____

Signature: _____ Date: _____

ATTACHMENT 1

1. GENERAL

The Consultant shall perform surveys and geotechnical investigations, prepare plan base mapping, and provide engineering and design services for the evaluation of five (5) alternative configurations, selection and approval of a preferred alternative, and design and engineering for the VA Route 7 (Leesburg Pike) interchange with VA Route 659 (Belmont Ridge Road). Bicycle and pedestrian facilities, as envisioned in the County's adopted Bicycle and Pedestrian Mobility Master Plan, will be accommodated in the initial and subsequent final design of the Interchange.

All engineering and design associated with this project shall be accomplished utilizing computerized design and drafting systems compatible with the Virginia Department of Transportation's automated design and drafting systems. The design system is GEOPAK Civil Design Software and the drafting system is Microstation. This project shall be developed utilizing the Virginia Department of Transportation's policies and procedures and Federal Highway Administration guidelines.

2. PROJECT MANAGEMENT AND COORDINATION

The Consultant's project manager shall monitor the progress of the project to ensure that all work is performed on schedule and within the approved budget. This task also includes documentation of internal technical reviews, progress reports, and requests for information, both internal and external. The Consultant shall document all meetings, conferences, and information obtained by telephone and personal visits. Accurate notes and minutes shall be typed, reproduced and distributed to the County's project manager within seven (7) working days. The Consultant shall concurrently submit all correspondence in electronic format (Word/Excel). Written documents, including estimates, design calculations and reports, shall be bound. The subject of the report, along with project name, contract number, and date shall appear on or be visible through the cover. The Consultant shall also provide an electronic copy of all documents in Word/Excel.

The Consultant may also be required to furnish data and materials to the County's project manager to support public outreach efforts conducted by the County pertaining to the project. The cost for furnishing such data and materials shall be considered incidental to the project. The County may require the Consultant's project manager, or mutually acceptable designee, to attend community meetings pertaining to the project. A separate fee to defray the cost of this participation on a per occurrence basis may be included in the fee proposal portion of the applicant's response to this request.

The Consultant shall undertake a traffic study of the interchange area. Although some general guidelines for the study are included, the formal scope of the traffic study shall be developed in consultation with the County's Office of Transportation Services (OTS) and VDOT. Execution of the study will be authorized by the County's project manager once the scope has been formally approved by VDOT. The traffic study shall consider the existing and planned future traffic conditions in a manner that is conducive to safety, durability and economy of maintenance. The term "adequately serve" shall be defined as meeting Level of Service (LOS) D. The traffic study shall evaluate existing conditions, opening year conditions, and forecast year conditions.

The Consultant shall be responsible for coordinating the design of this project to be consistent with, and conform to, the ongoing VDOT projects in the area, specifically Route 659 widening projects (VDOT Project ID# 0659 053 262 P102 R202 C502).

3. **PROJECT SCHEDULE**

A preliminary project schedule is listed below. The final schedule, with appropriate milestones, will be established once the County and the selected firm have finalized the project work program.

Advertise – Consultant Selection	12/07 – 1/08
Scoping - Contract Negotiations – NTP	2/08 - 03/08
Traffic Data Collection – Survey	03/08 – 06/08
Traffic Analysis – Alternatives Analysis	05/08 – 09/08
Public Hearing	10/08
Initial Design – Preliminary Engineering	08/08 - 02/09
County Board Action – VDOT Approvals	03/09

4 **DETAILED SERVICES**

Preliminary Engineering and Design Services

Task – 1 Kickoff Meeting/Preliminary Field Review

The Consultant shall attend a kickoff meeting scheduled by Loudoun County OTS. The purpose of this meeting will be to establish design criteria and requirements, schedules (including important milestones), and deliverables. During this meeting other project issues such as design, drainage, utilities, anticipated community outreach, and impending development will be discussed.

In anticipation of the kickoff meeting, the Consultant shall review available project information and perform a field reconnaissance of the project location with the goal of identifying important design considerations and issues to be addressed by this project.

Task – 2 Field Surveys and Base Mapping

The Consultant shall be responsible for all topographic surveys and preparation of base mapping for the project area. The Consultant shall establish the exact limits of the mapping and verify that all survey and base map information is in accordance with the contract requirements and is suitable for design purposes, as per VDOT requirements for a Location Survey.

The Consultant shall establish survey control in compliance with the VDOT survey manual. This will include recovering existing control and establishing new control monuments. The base survey shall conform to current VDOT Survey and CADD Standards, per the Survey and CADD Manuals.

The Consultant shall be responsible for preparing base maps, including preparation of planimetric and digital terrain model (DTM) data compilation in conformance with VDOT criteria. This information shall be compatible with VDOT's design software package, GEOPAK.

The Consultant shall perform geotechnical investigations for the project area and prepare a geotechnical report with appropriate recommendations.

The Consultant shall perform the necessary research of public records and field reconnaissance to obtain the information to be shown on the base plans. The Consultant shall provide a list of the names and addresses of all property owners that may be affected by the survey. The County will notify each property owner, by certified letter, that a survey crew may enter their property to conduct the survey. In accordance with VDOT policies, there will be a fifteen (15) day waiting period for "intent to enter" letter notifications.

Task – 3 Purpose and Need

The Consultant shall establish the purpose and need for the proposed interchange improvements. The purpose and need statement should include a summary of the project benefits, supported by appropriate analysis of why the existing intersection does not adequately serve the community and why it can not be improved to satisfactorily accommodate the design-year traffic demands. This section should also include an overview of how the proposed project conforms to all applicable land use and transportation plans (local, state and regional). It should also address whether the project is, or will need to be, included in the regional air quality analysis.

Task – 4 Traffic Analyses

The Consultant shall undertake a traffic study of the interchange area. The formal scope of the traffic study will be developed in consultation with the County's OTS and VDOT. Execution of the study will be authorized by the County's project manager once the scope has been formally approved by VDOT.

The traffic study shall consider the existing and planned future traffic conditions in a

manner that is conducive to safety, durability, and economy of maintenance. The term "adequately serve" shall be defined as achieving LOS D. The traffic study shall evaluate both AM and PM peak period travel conditions for the existing year, opening year, and forecast year conditions. (The actual timeline for the project years, including forecast, will be developed in consultation with VDOT and the County's OTS). The traffic forecast data will be used to evaluate the operating characteristics for the alternative design configurations developed for this interchange. The evaluation shall consider all traffic movements at the interchange including any interaction between the ramps and the adjoining local street network.

OTS will make its traffic forecast information available to the Consultant. The Consultant, in consultation with OTS, shall develop peak hour simulations for the agreed upon horizon years using modeling techniques that are acceptable to VDOT. In addition, OTS will make any previous data and information pertaining to this project available to the Consultant. This includes any previous traffic data or design alternatives developed for this location.

As a component part of the traffic study, the Consultant shall develop design and performance criteria that will be used to evaluate the various design alternatives developed for this project. The criteria should include, among other things, information related to levels of service, safety, constructability, costs, environmental considerations, economy of maintenance, and ability to maintain traffic (MOT) during the construction phase.

The Consultant shall undertake an evaluation of traffic safety issues in the interchange area. The limits of this study area are to coincide with the limits of the traffic study. The traffic safety study will make use of the three most recent years of accident data available from VDOT to assist in identifying areas of concern. The Consultant shall also rely on engineering best practices as well as input from OTS and VDOT in further detailing safety issues in the interchange area. The alternatives analysis, with supporting evaluation criteria, shall include an assessment of the potential safety benefits associated with each alternative.

⇒Additional Detail

The traffic analysis shall demonstrate that the preferred alternative does not adversely impact the safety and operation of Route 7, based on the existing, opening year, and forecast year traffic volumes.

A capacity analysis of the proposed interchange shall be required for basic ramp level of service, level of service for each approach, entrance/exit levels of service, weave/merge lengths and widths, and acceleration/deceleration lane lengths.

Other items to be addressed in the traffic analysis include:

- Mainline through lanes and crossroad (Belmont Ridge Road) Traffic Volumes (ADT) Including Turning Movements, Directional Distribution for Current Year, Opening Year, and Design Year (Ad date plus 22 years).

- Plan view map showing Existing "AM/PM Peak Hour" Volumes, Design-Year No-Build, Opening Year, and Design Year Build "AM/PM Peak Hour" Volumes for ramps, crossroad and mainline through lanes appropriately labeled.
- Plan view map showing Existing "AM/PM Peak Hour" LOS and delay. Design-Year No-Build "AM/PM Peak Hour" LOS and delay. Opening -Year Build "AM/PM Peak Hour" LOS and delay. Design Year Build "AM/PM Peak Hour" LOS and delay for ramps, mainline (Route 7) through lanes, including approaches and crossroads with calculated values for "AM/PM Peak Hour" LOS labeled as such.
- Provide Minimum Design Speed, Terrain type [Either qualitative (level, rolling, mountainous) or quantitative (percent grade and length)], Percent of Trucks for each movement, Lane Widths and offset distance to side obstruction if less than 6' (1.8 meters) and Peak Hour Factor (PHF) for:

- (1) Existing Conditions
- (2) Design Year "No-Build" Conditions
- (3) Opening Year "Build" Conditions
- (4) Design Year "Build" Conditions

- Weave Analysis: Any special weave type if not obvious from the configuration and weave lengths measured from gore area to gore area for:

- (1) Existing Conditions
- (2) Design Year "No-Build" Conditions
- (3) Opening Year "Build" Conditions
- (4) Design Year "Build" Conditions

- Ramp Junction Analysis

Provide Queue Lengths for Ramps, Length of Ramp Requirements to accompany queue, stopping sight distance, and taper length for:

- (1) Existing Conditions
- (2) Design Year "No-Build" Conditions
- (3) Opening Year "Build" Conditions
- (4) Design Year "Build" Conditions

- Summary Information – Operational Analysis

A summary of the HCM raw input and output data used for the operational

analysis should be provided (both in hard copy and electronic form) to both VDOT and the County. This information should include Level of service (LOS) of each element of the project (basic freeway, all ramp gores, weaving sections) for AM./PM Peak Hours and No-Build/Build conditions for both the year of opening and the design year. If Corsim is used to supplement the HCM, the following information shall be provided with the Corsim Analysis:

- CD with a copy of the .trf files.
- description of the method used to calibrate the Corsim model.
- an explanation of what default values were changed and why.
- an explanation of the number of runs and random seeds used to develop the final Corsim.
- a summary of the Corsim results in graphic or tabular format.
- a summary chart showing the Level of Service (LOS) results from the Operation Analysis.

Task – 5 Environmental Assessments

The environmental assessment shall be performed such that the project will qualify for federal funding. The Consultant shall initiate the State Environmental Review Process (SERP) for this project and, in consultation with VDOT, determine the level of NEPA documentation and permits, as applicable, will be ultimately required. The Consultant shall also conduct a survey of Historic and Cultural Resources in the study area, in accordance with the policies of the Virginia Department of Historic Resources.

Pending determination of the environmental assessment, the County may choose to engage the Consultant in a contract to complete any required NEPA documentation up to and including a "Record of Decision" or "Finding of No Significant Impact," depending on the findings of the environmental assessment.

Task – 6 Alternatives Analysis/Conceptual Design

One of the primary goals of this project is to gain design approval for a grade-separated interchange at this location. To gain approval the Consultant shall need to fully evaluate all reasonable design alternatives. This is to include an evaluation of all previous design concepts developed for this location. This information will be provided to the Consultant by VDOT and/or County staff.

For the alternatives analysis, the Consultant shall develop four (4) build alternatives. The Consultant shall develop these alternatives in collaboration with staff from the County's OTS and VDOT. Both the "No-Build" and "Build" options will be included in the final analysis (5 total alternatives).

No-Build Option – This analysis should focus on the existing highway network and its ability or inability to provide the access necessary to meet adopted land use and transportation goals and objectives, as well as providing satisfactory levels of service

(LOS) to accommodate the AM/PM Peak Hour Design Year traffic demands.

Build Options – This analysis shall evaluate each of the build options and, using the evaluation criteria established for the project, determine which alternative best meets the adopted land use and transportation goals established for the area.

The alternatives analysis shall include a complete description of the design alternatives being considered (i.e., diamond interchange, single point urban, directional ramps, split interchange, alternate locations, etc.) including layouts/configurations on aerial imagery. All design elements of the project such as horizontal alignments, typical sections, travel/auxiliary lanes, bridge structures, retaining walls, ramps, ramp radii, grades, lengths of acceleration/deceleration lanes, tapers, and weaving areas, should be depicted on the conceptual plans. Similar information should be provided to identify right-of-way, access control limits, traffic control information (ITS, signals, signs, and turn lanes) and finally, an analysis of any impending utility issues along with preliminary recommendations for resolving the same.

A detailed summary of the alternatives analysis, including the Consultants' conclusions and recommendations, shall be provided to both VDOT and the County's OTS. The Consultant shall also conduct a series of briefings and, at an agreed upon stage of the process, a public hearing to solicit comment on the design alternatives being considered. The public hearing shall be conducted to meet or exceed the requirements listed in the VDOT Policy Manual for Public Participation in Transportation Projects. A written transcript of all feedback received during this process shall be provided to VDOT and the County.

Task – 7 Preferred Alternative

For this task the Consultant shall provide both the County and VDOT with a final report summarizing its recommendations for the preferred design alternative. The Consultant will present this information to both the County's Board of Supervisors and VDOT for formal approval. Once approved, the Consultant shall advance the project to 30% design plans, which is the preliminary field inspection (PFI) stage. Pending available funding, the County may authorize additional design and engineering up to and including final design. Notice to Proceed will be given for Tasks 1 through 8 only. If funding becomes available Notice to Proceed will be given for Tasks 9 through 12. Offerors shall provide pricing for the additional design and that pricing shall remain firm for twelve (12) months after contract award.

Task – 8 Initial Design

This segment of Route 7 (Leesburg Pike) is designated as a component of the National Highway System (NHS). The design elements of all NHS facilities shall meet AASHTO design requirements - (A Policy on Geometric Design of Highways and Streets serves as the controlling document for all NHS designated routes). Furthermore, this segment of Route 7 between the Route 7 and Route 15 Bypass and Route 28 is planned to become Limited Access. The Consultant shall strive to design to the highest design standards possible. Deviations from the information contained in the AASHTO Green Book shall be indicated in the body of the report and serve as the basis for possible

design exceptions. All design exceptions will require a formal submittal to VDOT for approval. The Consultant shall prepare and submit eight (8) full size and three (3) half-size copies of the initial design (approximately 20%-30% complete) for the project.

In addition to information previously identified in Task 6, the Consultant shall be responsible for providing property information, utility designation of overhead and underground facilities, topography, preliminary drainage features, environmental considerations (e.g., potential wetland impacts, and avoidance considerations), pavement, bicycle and pedestrian amenities, and any existing structures that may be impacted by the project. The utility designation element shall comply with the VDOT's Utility Relocation Policies and Procedures Manual. Other project development elements shall include, but not limited to the following:

- Alignment and Grade
- Typical Section
- Right-of-Way & Construction Limits
- Maintenance of Traffic and Transportation Management Plans
- Sequence of Construction
- Hydraulic Analysis and Design
- Roadway Design
- Structure Design
- Traffic Control Devices, including lighting
- ITS Design

Finally, a detailed summary of the estimated costs of the project (broken down by preliminary engineering, right-of-way acquisition, utility easements, and construction), as well as proposed funding sources (i.e., private development, local funds, State or Federal-aid funds), and implementation schedule shall be provided. County staff will assist with project financing information.

As previously mentioned the plans will be comprehensive nature and sufficient to meet the latest edition of the VDOT standards and specifications for project development. The Consultant may be asked to participate in reviews associated with the bidability and constructability of the project. The Consultant may need to supply project information for the purpose of conducting a value engineering review of the project as well. The Consultant may also assist with the coordination of utility design for this project.

The Consultant shall incorporate all agreed upon changes resulting from the Preliminary Field Inspection, value engineering and public involvement processes.

Task – 9 Final Design (Construction Documents) (to be done only if funding is available)

This task consists of developing the selected scheme into completed construction drawings and specifications. The Consultant shall prepare the final construction plans for the interchange project that will include the following:

1. Finalize roadway design
2. Finalize the hydraulic design of the project and supporting documentation

3. Request for test hole data from the County as appropriate to verify the location of underground facilities and identify utility conflicts.
4. Revise grading and/or drainage design to alleviate conflicts, where appropriate.
5. Prepare plans for the relocation of utilities, as required.
6. Design signing, pavement markings, and roadside appurtenances such as guardrail.
7. Develop traffic management plans.
8. Establish final rights-of-way and easements.
9. Prepare final plan set consisting, but not limited to, the following:
 - Typical sections
 - General notes
 - Detail sheets, as required
 - Geometric data sheet
 - Traffic management plans
 - Roadway plan and profile sheets
 - Storm drainage profiles
 - Erosion and sediment control plans
 - Signing and pavement marking plans
 - Utility relocation plans
 - Cross sections
10. Final construction quantity and cost estimates
11. Prepare engineering data and reports necessary for regulatory permitting purposes.
12. Final design of stormwater management facilities
13. Prepare plats for the acquisition of rights-of-way and easements
14. Prepare Special Provisions, as required
15. Furnish professional sealed construction drawings and plats to the County

County reviews will be consistent with the milestone reviews contained in the VDOT's Project Development Concurrent Engineering Process (Field Inspection and Pre-Advertise Conference). The County review submission packages each require one (1) full-size set of drawings, four (4) half-size sets of the drawings and one (1) hard-copy of specifications with four (4) copies on separate CDs. Electronic submittals shall be made to VDOT in accordance with the VDOT CADD Manual. Due dates will be set forth in the schedule. At the 100 percent submission, the Consultant shall provide all of the above sets plus three (3) additional full size sets of signed/sealed documents, where each sheet of drawings has an original seal and signature plus three signed/sealed and bound sets of specifications.

County review comments in the form of marked up drawings, specifications and written comments will be returned to the Consultant after every submittal. The Consultant shall incorporate County comments into the construction documents after every review. The Consultant shall respond to the County comments in writing to the Project Manager after every review explaining that each item has been incorporated into the documents or will explain why it was not. The Project manager reserves the right to request additional sets of documents after every review is complete to verify that the Consultant has properly incorporated County comments.

- 60 Percent (Field Inspection) Submittal: Deliver the 60 Percent Submittal to the Project Manager. Review comments will be returned to the Consultant, who shall

incorporate the comments into the 95 Percent Submittal

- 95 Percent (Pre-Ad) Submittal: Deliver the 95 Percent Submittal to the Project Manager. Review comments will be returned to the Consultant, who shall incorporate the comments into the final 100 percent submission. The submittal shall include:

Construction drawings at 95 percent (Pre-Ad) stage shall be in compliance with the latest VDOT standards and specifications, Federal Highway Administration *Manual on Uniform Traffic Control Devices* and the Virginia Department of Conservation and Recreation policies and procedures. Drawings shall be detailed, reviewed, and fully coordinated among all VDOT disciplines.

Specifications – complete, typed, and including the list of submittals.

Cost estimates based on quantity take-off and unit material and current labor prices. The estimate shall be complete in every respect including overhead, profit, mobilization and demobilization costs, and quotations to support major cost items. The Consultant shall submit cost estimates using VDOT's Transport estimating system at the Field Inspection, Pre-Advertise and 100% milestones.

The County and VDOT will conduct constructability and bidability reviews at the Field Inspection and Pre-Advertise Conference milestones. The Consultant shall perform modifications to address these reviews at no additional expense to the County.

- 100 Percent Submittal: Submit the 100 percent drawings and specifications to the Project Manager for review. After County approval, submit the original drawings, sealed and signed on all sheets by a certified professional engineer in the Commonwealth of Virginia, and the original bound copy specifications, to the Project Manager. Retain one set of reproducible for filing. Any changes to the drawings and specifications at this stage shall be borne by the Consultant. The 100 percent submittal shall include:
 - Complete construction drawings to include Communication drawings, plus CAD files.
 - Electronic submission in accordance with the VDOT CADD Manual.
 - Complete construction specifications.
 - Cost estimate and design calculations revised according to the 95 percent submittal review comments.

Task – 10 Construction Bidding Phase (to be done only if funding is available) :

- a. Be responsible for answering questions from perspective bidders. All correspondences shall be documented and forwarded to the County's Purchasing Officer.
- b. Attend a Pre-Bid Conference. Present a brief overview of the project and prepare response to questions from bidders.

- c. The Consultant shall deliver a reproducible set of the construction documents to the selected firm identified by the County. These documents will remain available for reproduction for as long as necessary to complete bidding and construction. The Consultant is responsible for retrieving the documents.
- d. The Consultant shall prepare such clarifications and addenda to the bidding documents as may be required. The Consultant shall provide these to the County for review. The County will then direct the Consultant to provide the approved addendum for reproduction and distribution by the County.
- e. Should first bidding or negotiating prices be in excess of five percent (5%) of the approved Estimated Construction Cost, the Consultant shall participate with the County in such re-bidding, renegotiating, and design revisions, at no additional expense to the County, as may be necessary to obtain price(s) within the approved ECC or price(s) acceptable to the County. The County will assist in the design revision decisions. The County must approve all redesign.
- f. The Consultant shall review requests for substitutions and submit recommendation(s) to County for approval.

Task – 11 Construction Phase (to be done only if funding is available)

- a. The Consultant shall be responsible for preparing final construction documents that incorporate all issued addenda and shall provide one full reproducible set of the specifications and contract drawings and three sets of half-size drawings. The Consultant shall also provide to the County electronic specifications and contract drawings, which include all issued addenda.
- b. The Consultant shall lead and attend twice monthly progress meetings and be responsible for preparing and distributing meeting agenda including all outstanding items and new items to be discussed. The Consultant shall be responsible for preparing, distributing and correcting minutes from progress meetings that address all concerns of the Owner and the Contractor and monitor the construction progress.
- c. The Consultant shall submit site visit reports every two (2) weeks summarizing the construction progress, observations, deficiencies or other issues that may require further discussion. Reports shall also include the date and time of the site visit, project activities, ----. Copies of the reports shall be provided to the County Project Manager within 24 hours.
- d. The Consultant shall, when requested by the County, prepare Change order documentation. Change orders shall be identified as follows: Owner Changes: These will be additional services. Changes due to design errors or omissions: These will be at no cost to the County. Changes due to differing site conditions: These will be additional services. The Consultant shall review all contractor requests for change orders and make recommendations to the County. The Consultant shall periodically meet to review change orders to determine the nature of the change orders and the proper disposition thereof.

e. The Consultant shall respond to all Contractor Requests-For-Information (RFI), within ten (10) working days unless otherwise authorized by the County and prepare subsequent Project Modification (PM) drawings as required. The Consultant shall transmit all RFI responses and PMs to Owner for review prior to transmitting to the Contractor.

f. Should errors, omissions or conflicts in the drawings, specifications or other Contract Documents by the Consultant be discovered, the Consultant shall prepare and submit to the County, within five (5) working days unless authorized by the County, such amendments or supplementary documents and provide consultation as may be required, for which the Consultant shall make no additional charges to the County.

g. The Consultant shall not be responsible for construction means, methods, techniques, sequences or procedures, or safety precautions and programs in connection with the Work, and shall not be responsible for the Construction Contractor's failure to carry out the Work in accordance with the Contract Documents.

h. Periodic visits to the construction site by the Consultant shall occur not less than two times per month, timed to coincide with the twice monthly construction progress meeting with the Construction Contractor. Each engineering discipline shall make periodic visits not less than once monthly, during the course of work applicable to its discipline. During critical work phases, each of the disciplines may be required to make additional visits. On the basis of such on-site observations, the Consultant and any and all Consultants shall take the appropriate steps to guard the County against defects and deficiencies in the Work of the Construction Contractor. If the Consultant observes any work that does not confirm to the Contract Documents, the Consultant shall immediately make an oral and written report of all such observations to the County. The Consultant and any and all Consultants shall not be required to make exhaustive or full-time on-site observations to check the quality or quantity of the Work, but shall make as many observations as may be reasonably required to fulfill their obligations to the County.

i. The Consultant shall render written field reports relating to the periodic visits and observations of the Project required by the above paragraph within three (3) working days to the County in the form required by the County.

j. Based upon observations at the site and upon the Construction Contractor's applications for payment, the Consultant shall determine the amount owed to the Construction Contractor(s), shall consult with the Owner in the determination of the amount due the Construction Contractor and the Consultant shall sign the Certificate of Payment prior to the time it is transmitted to the County for payment. The Consultant's signing of a Certificate of Payment shall constitute a representation by the Consultant to the County, based upon the Consultant's observations at the site the County/Construction Contractor Contract, and shall within 7 days after receipt of Application from Construction Contractor, issue Certificates for Payment to the County in such amounts. The County and the data comprising the Application for Payment that the Work has progressed to the point indicated, that to the best of the Consultant's knowledge, information and belief, the quality of the Work appears to be in accordance with the Contract Documents. (This is subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion; the results of any subsequent tests required by the Contract Documents; minor deviations from the Contract Documents correctable prior to completion; and to any specific qualifications

stated in the Certificate for Payment.) In signing the Certificate of Payment the Consultant certifies that the Construction Contractor is entitled to payment in the amount certified. However, if it should later be found that the Construction Contractor has failed to comply with its contract with the County in any way or detail, such failures and subsequent compliance shall be the sole responsibility of said Construction Contractor provided that Consultant has complied with the terms of this contract. By signing the Certificate for Payment to the County, the Consultant shall not be deemed to represent that it has made any examination to ascertain how and for what purpose the Construction Contractor has used the monies paid on account of the Construction Contract Sum.

k. The County shall have authority to condemn or reject Work when in the County's or the Consultant's opinion the Work does not conform to the Contract Documents. The Consultant shall verify non-conformance and the County will issue a formal notice to the Construction Contractor. Whenever in the County's or the Consultant's reasonable opinion it is considered necessary or advisable to ensure the proper implementation of the intent of the Contract Documents, the County shall have the authority to require special inspection or testing of any Work in accordance with the provisions of the Contract Documents whether or not such Work is fabricated, installed or completed.

l. The Consultant shall be responsible for assisting the Construction Contractor in obtaining governing agency occupancy approval. If any exceptions arise related to the design or specified materials the Consultant will provide their services to correct the situation at no additional cost to County.

m. When the Construction Contractor states that the Work or portions of the Work are substantially complete, the Consultant and any and all Consultants shall inspect the Work or portions of the Work, prepare and submit to the County typed punch lists of the Work of the Construction Contractor(s) which is not in conformance with the Contract Documents. The County shall transmit such punch lists to the Construction Contractor(s). The Consultant shall inspect and prepare a punch list on portions of the Work.

n. The Consultant shall not issue revised construction documents without prior approval of the County, i.e. substitutions, drawing changes, and letters of correction.

o. The Consultant and any and all Consultants shall conduct up to three (3) comprehensive substantial completion inspections per construction contract at the request of the County. If more than three (3) substantial completion inspections are required for the project through no fault of the Consultant, the additional inspections shall be deemed additional services.

p. Review and recommend approval or disapproval of all construction contractor submittals including catalog cuts, shop drawings, material samples, manufacturer's certifications, and the contractor's construction bid cost breakdown. Copies of catalog cuts, shop drawings, material samples, and manufacturer's certifications shall be marked-up, stamped, and returned directly to the County. Submittal reviews shall be completed and returned to the County within 10 calendar days after receipt from the Project Manager. Deliver submittal reviews by overnight mail or hand deliver. Retain one copy of all approved submittals and a log of all submittals until construction is complete, at which time all copies will be returned to the Project Manager.

Each submittal copy and the Material Approval Request form shall be signed and sealed by a registered professional engineer or Consultant and shall include a statement regarding the submitted item's compliance with the drawings and specifications:

1. Submittal complies: Stamp "APPROVED"
Material Approval Request Forms: Check "APPROVED"
 2. Submittal complies, but with clarification or minor change (no re-submittal required): Stamp "APPROVED AS NOTED" and note clarification or change that is required for compliance. Material Approval Request Forms: Check "SEE REVERSE" and write on the back of the form the clarification or change that is required for compliance.
 3. Submittal does not comply (requires re-submittal and review): Stamp "DISAPPROVED - RESUBMIT" and note reason for disapproval. Material Approval Request Forms: Check "DISAPPROVED" and "SEE REVERSE" blocks and type on the back of the form "DISAPPROVED - RESUBMIT" and reason for disapproval.
- q. Attend bi-weekly progress meetings to be held at the site. Submit a report summarizing the construction progress, observations, deficiencies or other issues that may require further discussion.
- r. Periodic site visits by the major system designers is included in this task.

Task – 12 Post-Construction Phase (to be done only if funding is available)

- a. Conduct thorough punch list inspections and prepare the written punch list incorporating those items compiled by the County. This task includes the inspection conducted prior to expiration of the warranty period.
- b. Prepare record "as-built" drawings on CAD files based on marked-up prints, drawings and other data furnished by the General Contractor. Submit final record drawings within 30 calendar days after receipt of marked-up drawings from the General Contractor. All final revisions shall be on the signed reproducible sheets and CAD files on diskette. The final "as-built" drawings shall show the actual construction only, except where the originals contain portions of the drawings marked "N.I.C." (not in contract) or when optional methods of construction are shown. Deletions or superseded portions of the drawings, or original methods of construction not used, shall be crossed out and noted "NOT BUILT". No change need be made to those portions, and symbols shall be removed from the body of the drawings. The revision notation in the revision block shall remain. Where a drawing is modified to show "as-built" conditions, the notation "RECORD DRAWING" shall be entered on the top most available line in the revision block.
- c. The Consultant shall prepare a set of reproducible record drawings which show significant changes in the Work made during the Construction process, based on neatly and clearly marked-up contract drawings, prints, and other data furnished by the construction Contractor(s) and the applicable Addenda, Clarifications, and Change Orders which occurred during the Project.

- d. The Consultant and any and all Consultants shall conduct a comprehensive Final Completion inspections for the project at the request of the County. If additional Final Completion inspections are required for the project, through no fault of the Consultant, the additional inspections shall be deemed additional services.
- e. Upon correction of the deficiency reports (punch lists), and acceptance of all other closeout submittals and certificates of the Construction Contractor, the County and the Consultant shall approve the Application for Final Payment.
- f. The Consultant and any and all Consultants shall conduct an inspection of the project, with the exception of furniture and equipment, ten (10) working days prior to warranty expiration and provide to the County a written report specifying any warranty deficiencies which may exist.